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## ABSTRACT

This study reports the results of a survey sent to 67 metropolitan school district evaluators. The survey assessed past and anticipated conduct of cost analysis methods, as well as attitudes toward the use of these methods. The instrument used contained many items taken from a survey instrument used in a previous study of cost analysis methods at state education agencies. Results indicated that the number of school district evaluation units required to conduct some type of cost analysis study is expected to increase over 50 percent in the next five years, as well as an anticipated increase in all five types of cost studies (cost description, cost feasibility, cost utility analysis, cost benefit analysis, and cost effectiveness analysis). The major impediments to using these methods were: (1) results are not complete; (2) they do not help improve program operations; (3) outcome data are usually not available; and (4) institutional requests for cost studies are insufficient. A separate attitudinal scale for cost-effectiveness methodology also revealed methodological impediments. However, the data suggest that as the number of cost analysis studies increases, the evaluators' attitudes toward these methods may become more positive. Appendices contain samples of survey letters and the survey instrument itself. (DWH)

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No. 103 COST ANALYSIS AT THE LOCAL LEVEL:  
APPLICATIONS AND ATTITUDES

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November 1984

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## PREFACE

The Research on Evaluation Program is a Northwest Regional Educational Laboratory project of research, development, testing, and training designed to create new evaluation methodologies for use in education. This document is one of a series of papers and reports produced by program staff, visiting scholars, adjunct scholars, and project collaborators--all members of a cooperative network of colleagues working on the development of new methodologies.

To what extent are local school districts using cost analysis methods in their evaluation work? What problems are the districts having in using cost methods? and what are the prospects for future use? These and related questions are answered in this report of cost analysis activities conducted by a national sample of 67 metropolitan school districts.

Nick L. Smith, Editor  
Paper and Report Series

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## **COST ANALYSIS AT THE LOCAL LEVEL: APPLICATIONS AND ATTITUDES**

### **Introduction**

There are currently many indications that cost analysis is being recognized as a useful method in educational evaluation. A recent survey of educational evaluators showed that over the next five years nearly 60 percent of state level evaluation units will be required to conduct cost analysis studies (Smith, N. L. & Smith, J. K., 1984). The number of cost analysis questions asked of consultants by local districts and state departments of education is increasing (Gray, P. J. & Smith, J. K., 1983). Evaluators are requesting information on cost analysis methods in the form of special training sessions at conferences (B. Ingle, personal communication, October 10, 1984), and written materials (Smith, N. L. & Smith, J. K., 1984). The number of published articles on cost-analysis applications is increasing yearly (e.g., see Smith, J. K. & Smith, N. L., 1983 for a bibliography of over 350 references to the use of cost analysis in evaluation, and Warner, K. & Hutton, R., 1980, for a review of cost analysis articles in health evaluations).

The study reported here is one in a series of four studies designed to determine the state of practice of cost analysis methods in educational evaluation, and to identify attitudinal factors which might be affecting application of the methods. The first in the series of studies looked at the conduct of cost analysis studies by an educational research and development laboratory (Smith, J. K., 1983). The second study included an analysis of published examples of cost analysis evaluations (Smith, N. L. & Smith, J. K., 1984). The third study explored applications of cost analysis in state department of education evaluation units (Smith, N. L. & Smith, J. K., 1984). This

fourth study focuses on applications of cost analysis methods by evaluation units in school districts.

This report describes the results of a survey sent to 67 metropolitan school district evaluators. The survey assessed past and anticipated conduct of cost analysis methods, as well as attitudes toward the use of these methods. The report is divided into four major sections: (1) Procedure, (2) Results: Applications, (3) Results: Attitudes, and (4) Conclusion.

### Procedure

#### Sampling Method

Over 15,000 school districts (also referred to as local education agencies (LEAS)) in the United States enroll from 1 to 900,000 students. The intent of this study was to look at cost studies as they are conducted by evaluation units in local school districts, rather than to look at which districts do and do not conduct cost studies. Lyon, Doscher, McGranahan, and Williams (1978), found that the existence of a formal evaluation unit in an LEA is positively related to the size of the district. Specifically, 89 percent of LEAs in metropolitan districts (45,000 or more students) have evaluation units, while only 59 percent of LEAs in large districts (25,000-44,999 students) and 33 percent of LEAs in medium-sized districts (10,000-24,999 students) have evaluation units. Because metropolitan districts are most likely to have formal evaluation units, we chose to survey this group for our study.

The names and addresses of directors of LEA evaluation units which serve districts of 45,000 or more students were obtained from the Lyon et. al. study (1978). This list was updated to reflect the names of current evaluation unit directors and address changes. In all, 67 metropolitan districts with formal education units were identified. Surveys were sent to these 67 units.



The survey method used was the personalized approach combined with repeated mailings, as advocated by Dillman (1978). The survey (see Appendix), along with a personalized cover letter (see Appendix), and a self-addressed, stamped, return envelope, were mailed to each evaluation unit director. One week later a postcard reminder was sent (see Appendix). After four weeks, 29 completed surveys had been received.

At this time, another personalized letter (see Appendix), the survey, and a return envelope were mailed to the 38 directors who had not returned the survey. Five completed surveys were received as a result of this effort. Two weeks later a telephone call was made to each of the 33 remaining nonrespondents to determine whether the survey had ever been received, and whether it would be returned. Eighteen completed surveys were returned following the telephone calls.

In total, 29 surveys were returned after the initial letter and postcard, and 23 were returned after the second letter and telephone call, resulting in 52 completed surveys. Each evaluation unit returning the survey was sent a thank-you letter containing a summary of the study results (see Appendix), and a complimentary copy of Henry Levin's new book, Cost Analysis: A Primer (1983).

### Instrument Development

A survey booklet containing four major sections was used in this study. Most survey items were taken from a survey instrument used in an earlier study of cost analysis methods at state education agencies (Smith, N. L. & Smith, J. K., 1984).

The first section of the survey was designed to assess the conduct of past cost analysis studies, and to obtain projections of anticipated cost studies. The second section contained a scale that measured attitudes toward the conduct of cost analysis methods in general. This scale was shown to be reliable in the state education agency (SEA) study by a standardized alpha coefficient of .64. The third section of the survey contained a scale that measured attitudes toward the conduct of cost

effectiveness analysis in particular. Cost-effectiveness analysis has been suggested to be the most appropriate cost analysis method for educational evaluation (Levin, 1983), and we were interested in determining evaluators' attitudes toward this method. The cost-effectiveness attitude scale, also developed for the SEA study, had a reliability of .73. The final section of the survey contained questions about characteristics of the evaluation unit and about the responsibilities assumed by its staff.

### Sample Description

Of the 67 metropolitan school districts with evaluation units in 1983, 52 (78%) returned completed surveys. A check was made to identify nonrespondent bias resulting from the 15 surveys not returned. According to the National Center for Education Statistics for 1981-1982, the average enrollment of these 15 districts was 74,403 students. In contrast, according to the same source, the average enrollment of the districts which returned the survey was 97,792. Because of these size differences, the results of this study may be slightly biased in favor of larger districts in the metropolitan size category.

The average metropolitan school district evaluation unit had 9.6 full-time staff and a budget of \$596,101. In order to determine the range of responsibilities assumed by these units, respondents were asked to check, from a list of 10, all major responsibilities assumed by staff in their unit. The primary responsibilities of these staff were:

conduct of evaluation studies	92.3%	n = 48
consultation and technical assistance	88.8%	n = 48
research studies	80.8%	n = 42
the conduct of needs assessments	78.8%	n = 41
running testing programs	76.9%	n = 40
evaluation monitoring	75.0%	n = 39
provision of information	71.2%	n = 37

Less than half of the LEAs were involved in planning activities (48.1%, n = 25), or policy analysis (42.3%, n = 22).

## Results: Applications

### Requirements to Conduct Cost Studies

To obtain a picture of current requirements to conduct cost analysis studies, we asked whether there was a formal expectation or requirement within the district to conduct some form of cost analysis work. Only 21 percent of the districts ( $n = 11$ ) were currently required to conduct cost analysis studies, and an average 3.3 percent of their budget was allocated to this type of analysis. We then asked whether a formal expectation or requirement to do some form of cost analysis was anticipated within the next 5 years. The percent of LEAs expecting to be required to conduct cost analyses over the next 5 years increased from 21 percent to 71 percent ( $n = 37$ ). Further, they anticipated that an average of 9 percent of their total budget would be allocated to the conduct of cost studies in the next 5 years.

When asked to explain the increase of requests for this type of analysis, some respondents said, "Limits on resources and the climate of high need for accountability lead us to expect more formal requests for cost analyses;" "Cost analysis is becoming more essential due to shrinking funds and demands of the public that all programs be analyzed in terms of cost-effectiveness;" and "[Cost analysis] work we've done to date has been well received."

Those units that had not been required to conduct any cost studies in the past five years were asked to indicate the primary reason no cost studies had been conducted. In these open-ended questions, two reasons stood out: (1) 10 respondents said that they were not asked to conduct studies, or that their decision makers were not interested in cost analysis data; (2) five respondents said that other units conducted cost studies (e.g., budget or accounting departments). Additional comments included, "Decision makers don't have a good concept of what cost studies produce for their use. They don't understand what they are, or how to use them;" and "Studies have been done, but these cost

studies were basically done by finance and operations people." Other reasons for not conducting cost studies included time and staff limitations (n = 3); the lack of knowledge about cost analysis methods (n = 2); project mandates which would negate cost analysis results (n = 2); changes in office staff (n = 1), and unavailability of data (n = 1).

#### Applications of Cost Analysis Methods

We wanted to determine the purposes for conducting cost analysis studies, and asked respondents to indicate the number of five different cost analysis methods they had conducted in the past, or expected to conduct in the future. Table 1 describes the five cost analysis methods, and gives the number of these methods which have been conducted and the number anticipated.

Clearly, the most frequent reason to conduct a cost analysis is to describe the costs of a program or programs. This method has been used, and is expected to continue to be used, with significantly more frequency than any other method. The average number of cost descriptive studies is projected to increase from 8.9 to 16.4 over the next five years. Of special interest here is the large range in the number of past and anticipated cost descriptive studies, as compared to the range in the number of other types of cost studies. One explanation for this large number of cost descriptive studies is that some respondents may have perceived the maintenance of program budgets as a cost description. In that case, the number of cost descriptions may equal the number of programs sponsored or supervised by the evaluation unit.

The number of times each of the other types of cost analysis methods have been conducted is much smaller, although an increase is expected for each over the next five years. The method conducted with the second highest frequency is cost feasibility. Of the three cost-outcome methods, cost-effectiveness analysis is projected to be conducted most often, followed by cost-utility and cost-benefit analysis.

Table 1

Mean Number of Past and Anticipated  
Cost Studies Conducted by LEA Evaluation Units

<u>Purpose of Cost Study</u>	<u>Mean Number of Cost Studies</u>	
	<u>Done in past 5 years (range)</u>	<u>Anticipated over the next 5 years (range)</u>
a. To describe the costs of a program or programs (cost description)	8.9 (0-225)	16.4 (0-205)
b. To compare the costs of a program or programs with resources available to see if they are affordable (cost feasibility)	2.2 (0-50)	3.3 (0-50)
c. To compare costs and outcomes for 2 or more programs, where outcomes are estimated (cost utility analysis)	.54 (0-5)	1.4 (0-12)
d. To compare the costs and outcomes for 2 or more programs, where outcomes are measured in dollars (cost benefit analysis)	.46 (0-10)	.92 (0-24)
e. To compare the costs and outcomes for 2 or more programs, where outcomes are measured in test scores, behavioral ratings, etc. (cost effectiveness analysis)	1.4 (0-20)	2.7 (0-40)

At first glance, the number of cost utility, cost-effectiveness, and cost benefit studies appear to be very few in comparison to the number of cost descriptive and cost feasibility studies. For example, according to these figures, each LEA will be conducting an average of two-to-three cost-effectiveness analyses, as compared to about 16 cost

descriptive studies over the next 5 years. In terms of the implementation of these methods, however, this number of cost-effectiveness studies is quite realistic. Levin (1983) has said that even the simplest cost-effectiveness study takes at least six months to conduct. Our experience shows that even six months may be an optimistic estimate. In light of the time required to conduct a cost-effectiveness study, two-three per district over a five-year span is an ambitious task.

#### Descriptions of Cost Studies Conducted

We provided space on the survey for respondents to describe what they considered the "best" example of a cost analysis conducted in their unit during the past five years. Thirty "best" studies were described. In terms of the content area of these studies, eight studies were conducted on reading programs. The other descriptions included studies of program components (e.g., the cost of aides versus teachers,  $n = 6$ ), analysis of special programs (e.g., summer school,  $n = 4$ ), alternative time schedules ( $n = 3$ ), alternative math programs ( $n = 3$ ), facility costs ( $n = 2$ ), and one analysis each of transportation alternatives, testing alternatives, special education alternatives, and science program alternatives.

These "best" examples most frequently used cost-effectiveness analysis ( $n = 10$ ) which has been identified as the most appropriate method for educational evaluation (Levin, 1983). Other methods used included cost description ( $n = 9$ ), cost benefit ( $n = 5$ ), cost feasibility ( $n = 4$ ), and cost utility ( $n = 2$ ).

We also asked for an indication of the value of the study, and how the results were used for decision making. The vast majority said that the study results were put into action ( $n = 22$ ), and that the study was very valuable in decision making ( $n = 19$ ). Only four respondents said that the study had not been of value in decision making.

## Summary

According to these respondents, the number of school district evaluation units required to conduct some type of cost analysis study will increase over the next five years by 50 percent. Correspondingly, the data show an anticipated increase in the number of all five types of cost studies, especially cost descriptive studies. The next section focuses on attitudes about cost analysis methods and how these attitudes might affect the conduct of cost analysis studies. A discussion of attitudes about cost analysis methods in general is followed by a discussion of attitudes about cost-effectiveness analysis in particular.

## Results: Attitudes

### Attitudes Toward Cost Analysis

In order to assess attitudes toward the use of cost-analysis in educational evaluation, respondents were asked to complete a general scale of "impediments" toward the use of these methods. This scale had been developed during a previous study of applications of cost-analysis at the state level. The scale items were derived through our earlier research, and through identification of impediments cited in the literature. The empirical basis for identification of the impediments helped to insure proper face and content validity for the scale. Further, following analysis of the state level evaluators responses, a reliability coefficient (standardized item Alpha) was computed at .64. Because of the demonstrated reliability and apparent validity, this scale was used in the current study.

The reliability of this scale for the local level evaluators was again high, as shown by the standardized alpha coefficient of .76. Further, respondents agreed that many scale items were indeed an impediment, as shown by the ratings in Table 2. The greatest impediments to the conduct of a cost analysis study were:



	<u>Mean</u>	<u>Don't Know</u>
We are seldom asked to do cost studies	3.26	0
Cost study results are incomplete because it is not possible to include all important cost factors	3.17	4
Cost results do not tell managers how to improve program operations	3.07	5
Accurate outcome data are usually not available	3.05	4

Three of the four greatest impediments have to do with methodological problems with cost analysis methods: the results are not complete; they do not help improve program operations; and outcome data are usually not available. The largest impediment, however, is of a more political nature: until there is administrative and institutional support for cost analysis studies, and until more of them are requested, these studies are unlikely to be conducted.

Another methodological problem, the lack of availability of cost data, correlated highly with several other impediments on the scale. For example, the most highly correlated items were: studies take too much time and cost data are usually not available (d with  $r = .62$ ); studies cost too much to conduct and cost data are usually not available (e with  $r = .65$ ); and results are incomplete because it is not possible to include all cost factors and cost data are usually not available (g with  $r = .61$ ).

#### Attitudes toward Cost Effectiveness Analysis

The second attitudinal scale dealt specifically with cost-effectiveness analysis. This scale was developed in the same manner as that of the general cost analysis scale, using previous research experience and the literature to derive the impediments items. This maximized the content and face validities of the scale. In addition, analysis of the state level data for this scale resulted in a standardized alpha coefficient of .73.



Table 2

Impediments to the Use of Cost analysis in  
LEA Evaluation Units

<u>Item</u>	<u>Mean*</u>	<u>Don't Know</u>
a. We are seldom asked to do cost studies	3.26	0
b. Decision makers are not often interested in actual cost information	2.76	1
c. Decision makers do not often use the results of cost studies	2.44	1
d. It takes too much time to conduct cost studies	2.84	6
e. It costs too much to conduct cost studies	2.48	4
f. Accurate cost data are usually not available	2.82	5
g. Cost study results are incomplete because it is not possible to include all important cost factors	3.17	4
h. Accurate outcome data are usually not available	3.05	4
i. It is difficult to relate cost data to educational outcomes	2.78	2
j. Cost results do not tell managers how to improve program operations	3.07	5
k. We lack staff with the technical capability to conduct cost studies	2.51	1
l. We lack available consultants or experts to help us conduct cost studies	2.36	2
m. We do not have sufficient experience in conducting cost studies	2.63	2
n. We have few guidebooks, texts, or examples to follow in conducting cost studies	2.90	2
* 4 = Strongly Agree 3 = Agree 2 = Disagree 1 = Strongly Disagree		

Mean is based on N of 52 minus number of Don't Knows

An analysis of the responses of district level evaluators showed a standardized alpha coefficient of .86. Their ratings of the impediments on this scale are shown in Table 3. Five out of eight items were perceived as impediments by the respondents, as indicated by mean ratings of 3.0 or above. Like the impediments to the conduct of cost analysis studies in general, the impediments to the conduct of cost-effectiveness analyses were methodological in nature. These impediments were that the method was costly and complex ( $m = 3.30$ ), limited in assessing outcomes ( $m = 3.53$ ), provided no information on local conditions ( $m = 3.40$ ), too technical ( $m = 3.34$ ), and needed methodological development ( $m = 3.30$ ). Interestingly, the decision makers' disinterest in cost-analysis was the least of all the impediments.

Again, the items most highly intercorrelated all had to do with the methodology involved in the conduct of a cost-effectiveness analysis. That cost-effectiveness was seen as costly and complex was related to its limitations in assessing multiple program outcomes ( $d$  with  $e = .63$ ); the complexity of cost-effectiveness analysis was also related to the technical difficulty of the method ( $d$  with  $g = .63$ ); finally, the complexity was related to the need for further development of the method ( $d$  with  $h = .67$ ).

The perception that cost-effectiveness methodology needs development was related to the perception that cost-effectiveness gives no information on program procedures or local conditions ( $h$  with  $f = .60$ ); the need for method development was also associated with the perception that the method is too technical ( $h$  with  $g = .62$ ).

### Conclusion

The data show that cost-analysis methods are anticipated to be a part of local evaluations in the future. Although only 21 percent of local evaluation units have had a formal requirement to conduct cost studies in the past, this is expected to increase

Table 3

Impediments to the Use of Cost Effective  
Analysis in LEA Evaluation Units

<u>Item</u>	<u>Mean*</u>	<u>Don't Know</u>
a. Cost-effectiveness analysis is often unnecessary because decision makers are not interested in relating program costs and effects	2.34	1
b. Cost-effectiveness analysis is often not feasible because comparative program studies are seldom possible	2.86	3
c. Cost-effectiveness analysis is too specialized a technique to be generally applicable	2.71	6
d. Cost-effectiveness analysis is so costly and complex that it is warranted only for major studies	3.30	10
e. Cost-effectiveness analysis considers only a limited number of program outcomes and so does not represent true program effects	3.53	10
f. Cost-effectiveness analysis is of limited utility since it provides no information on program procedures or local conditions	3.40	11
g. Cost-effectiveness analysis is difficult to do because of technical details (e.g., discount rates) and the need for sophisticated analysis procedures	3.34	10
h. Cost-effectiveness analysis cannot be applied to educational programs without further development of the method	3.30	11

- \* 4 = Strongly Agree  
3 = Agree  
2 = Disagree  
1 = Strongly Disagree

Mean is based on N of 52 minus number of Don't Knows

to 71 percent over the next five years. To quote one respondent, "As managers become more familiar with cost-analysis work, more requests will be made."

In a final analysis, we attempted to identify relationships between evaluation unit characteristics, attitudes, and past and anticipated conduct of cost analysis studies. Correlation matrices among unit descriptors (e.g., budget, number of staff, district size, responsibilities), attitudinal scale items, and experience with the methods (e.g., total number of cost studies conducted; total number of effectiveness studies) were conducted.

No unit descriptors correlated significantly with either past or anticipated studies. However, experience with the methods in the past was significantly related to the anticipated conduct of the methods in the future. There was a significant correlation between the number of past cost-effectiveness studies and the number of anticipated cost-effectiveness studies ( $r = .83$ ,  $p = .001$ ). Similarly, the total number of all cost studies correlated significantly with the total number of anticipated studies ( $r = .84$ ,  $p = .001$ ). Those who had conducted cost-analysis studies in the past were most likely to conduct such studies in the future.

Experience with the methods was also related to the perception of impediments or problems with implementing both cost-analysis studies in general and cost-effectiveness analyses in particular. Every impediment on the general cost analysis index correlated negatively with the total number of past cost studies conducted. That is, as the number of studies conducted increased, the perception of impediments decreased. Certainly, not all of the correlations were significant, but all were negative, and the trend was clear.

Negative correlations were also observed between the number of past cost-effectiveness analyses conducted and perception of impediments in conducting a cost-effectiveness analysis. Again, all the correlations were negative, suggesting that, as the number of cost-effectiveness studies conducted increases, the perception of impediments decreases.

Another interesting observation on attitudes toward cost-effectiveness analysis was also related to respondents' experience with the method. The largest impediments to the conduct of cost-effectiveness analysis also had the largest number of "don't know" responses. For example, while only one respondent didn't know whether decision makers were interested in relating program costs and effects, 10 or more didn't know whether the methodological issues described in items d - h were an impediment. This number of "don't know" responses was not found on the general cost analysis scale. It appears that some respondents did not have enough experience with cost-effectiveness analysis to be able to rate methodological impediments to the analysis.

In summary, evaluators expect to be conducting more cost analysis studies in the upcoming five years. This increase may affect the way evaluators view cost analysis methods. The data suggest that, as the number of cost analysis studies increases, evaluators' attitudes toward the methods may become less negative. Given that large increases are anticipated in the number of requests for cost analysis studies, more evaluators may endorse cost analysis methods as reasonable and useful tools for educational evaluation over the next few years.

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## APPENDIX

Letter accompanying survey  
Followup postcard  
Followup letter  
Thank-you letter to respondents  
Survey

Letter accompanying survey

Northwest  
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Laboratory



300 S.W. Sixth Avenue • Portland, Oregon 97204 • (503) 248-6800  
TELEX: 701716 CABLE: NWREL SOURCE: STL058

May 18, 1984

Dear

Are evaluators in your evaluation unit being asked questions like "Can we really afford this new program?" or "Which of the two programs helps students most for the least money?" School staff and administrators dealing with declining school resources are increasingly asking local district evaluators such questions.

We at the Northwest Regional Educational Laboratory are working to help school district evaluation units look at educational costs and include them where appropriate in their evaluation work. We are doing this by studying how evaluators currently use costs, by developing more efficient and practical cost methods, and by providing support materials for district evaluator use.

In order to aid evaluators like yourself deal with costs, we need your help. We would appreciate it if you would take a few minutes to complete the enclosed survey. We believe that by answering as a representative for your evaluation unit, you can provide us with important information about the use of cost analysis methods in educational evaluation.

We know that some evaluation units have had little or no experience in doing cost studies. Even if this is the case for your unit, your answers are important to us. Your evaluation unit was chosen because of your experience and the size of your district--we are interested in why metropolitan evaluation units like yours do or do not use cost data. Therefore, please complete this survey even if your experience with cost studies is limited.

We will keep your answers completely anonymous. Each survey contains an identification number for mailing purposes only. This is so that we can check your name off the mailing list when your survey is returned. If you would like to receive a summary of the results of this study, write "copy of results requested" on the back of the return envelope, and print your name and address below it. Please do not put this information on the survey itself.



May 18, 1984  
Page 2

Please complete the survey today, if possible, and return it in the enclosed self-addressed stamped envelope. We need to begin tabulating responses soon. If you have any questions or comments on this survey, please do not hesitate to write or call 1-800-547-6339.

Thank you for your assistance.

Sincerely,

Jana Kay Smith, Ph.D.  
Research on Evaluation Program

Enclosures

Followup Postcard

March 22, 1984

Last week we sent you a questionnaire on the use of cost analysis methods in your evaluation unit.

If you have already sent it back, please accept our sincere thanks. Your contribution to this study is most appreciated. If you have not yet returned it, please do so today. Because the questionnaire was sent to only one person in your district, it is essential that we have your questionnaire if we are to understand how metropolitan school districts do and do not use cost data in evaluations.

If by some chance you did not receive the questionnaire, or it got misplaced, please call us right now, on our toll-free number 1-800-547-6339, and we will get another one in the mail immediately.

Thank you for your cooperation.

*Jana Kay Smith*

Jana Kay Smith, Ph.D.  
Research on Evaluation Program

*Nick L. Smith*

Nick L. Smith, Director  
Research on Evaluation Program

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Followup Letter

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April 4, 1984

Dear

About three weeks ago you received a survey on the use of cost analysis methods in educational evaluation. As of yet we have not received your completed survey.

The study looks at the practice of cost analysis in school district evaluations and at factors that might affect the conduct of cost analyses.

We are writing to you again because of the importance of including your survey in our study. Only one survey was sent to your school district. Consequently, it is essential that you return your survey if the results are to accurately portray the use of cost analysis methods in school districts.

In the event that your survey has been misplaced, we have enclosed another copy. If you have any questions or comments, please don't hesitate to write or call 1-800-549-6339.

Your cooperation is greatly appreciated.

Sincerely,

Jana Kay Smith, Ph.D.  
Research on Evaluation Program

Nick L. Smith, Ph.D., Director  
Research on Evaluation Program

Enclosures

## Thank-you Letter to Respondents

November 19, 1984

Dear :

Several months ago you assisted us with a survey about the use of cost analysis methods in metropolitan school district evaluation units. We are very grateful for the help you provided us, and are writing to share with you some of the results of the study.

Of the 67 metropolitan school districts we surveyed, 52 (78%) completed our questionnaire. Most evaluation units had had some experience with cost analysis methods, particularly with cost descriptions and cost feasibility analyses. Although, in general, the number of studies done was low and the methods used were relatively simple, the units doing cost studies reported being pleased with the impact of their efforts.

At the time of the survey, 21 percent of the units said there was currently a formal expectation or requirement that they do some form of cost analysis work, and they estimated devoting an average of 3.3 percent of their budgets to cost work. When asked to project future requirements to conduct cost analysis work, 71 percent anticipated having a formal requirement to do cost studies, and expected to spend an average of 9 percent of their budgets for that purpose. Clearly, the respondents anticipate conducting more cost studies in the future.

We also looked at the impediments or problems in conducting cost analysis studies. We found that as experience increased (measured as total number of cost studies conducted in the past 5 years), the impediments or problems in implementing cost studies decreased. Since the number of cost studies conducted by school districts is expected to increase over the next few years, we would expect evaluators to have fewer problems in doing cost studies.

We are continuing our work on cost analysis methods in 1985, including developing more streamlined methods for evaluation use, and producing guidebooks and examples to help evaluators conduct cost analysis studies. We welcome your suggestions, questions, and requests for materials.

November 19, 1984  
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Enclosed is a copy of Henry Levin's new book Cost-Effectiveness:  
A Primer which was developed in part with our support. We would also be  
happy to send you a copy of the full survey report, "Cost Analysis at the  
Local Level: Applications and Attitudes," upon request. Thank you again  
for participating in our survey study.

Cordially,

Jana Kay Smith, Ph.D.

Nick L. Smith, Ph.D.

Research on Evaluation Program

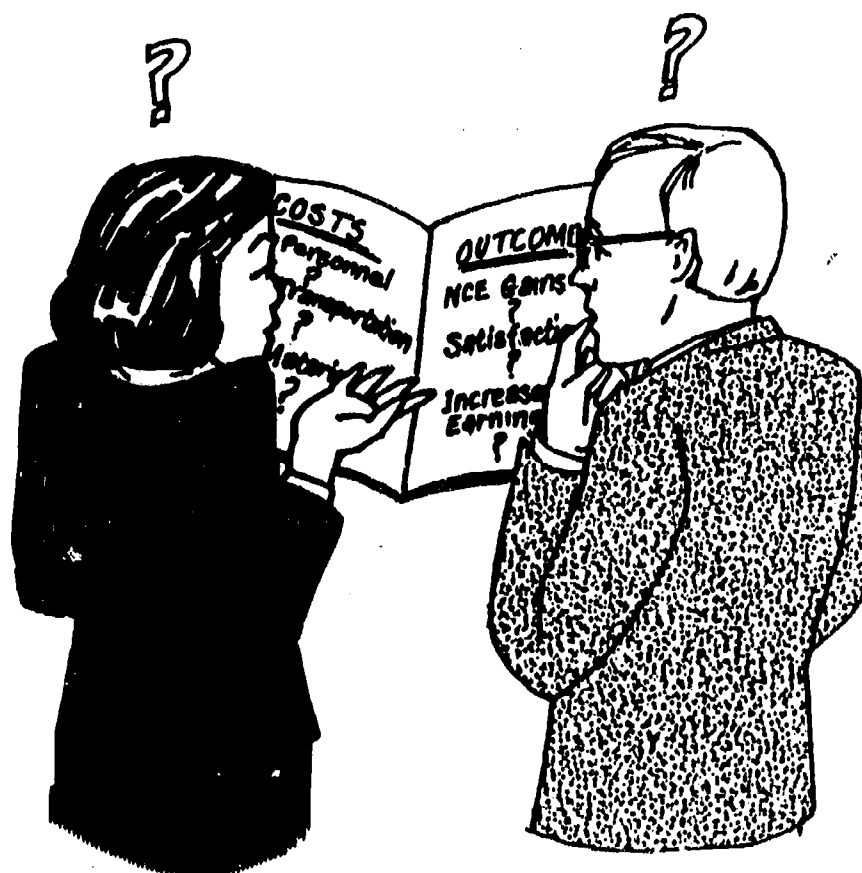
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Enclosure

## Cost Analysis in School District Evaluation Units

This is a survey to find out (a) how school district evaluation units currently use cost data in their evaluations, and (b) what factors might influence their use of formal cost analysis methods.

Please answer all of the questions. If you wish to comment on any questions or to qualify your answers, please use the margins or a separate sheet of paper.

Thank you for your assistance.



Conducted by:



Research on Evaluation Program  
Northwest Regional Educational Laboratory  
300 S. W. Sixth Avenue  
Portland, Oregon 97204

### COST ANALYSIS IN SCHOOL DISTRICT EVALUATION UNITS

Some school district evaluation units receive requests for cost information. In order to assist them, we need a more complete understanding of what kinds of cost work are currently being conducted and what work is likely to be requested.

1. Listed below are several purposes that cost analysis studies can serve. Please write the number of cost studies conducted for each purpose by your evaluation unit in the last five (5) years and the approximate number anticipated over the next five (5) years.

PURPOSE OF COST STUDY	NUMBER OF COST STUDIES	
	DONE IN PAST 5 YEARS	ANTICIPATED OVER THE NEXT 5 YEARS
a. To describe the costs of a program or programs (cost description)	_____	_____
b. To compare the costs of a program or programs with resources available to see if they are affordable (cost feasibility)	_____	_____
c. To compare costs and outcomes for 2 or more programs, where outcomes are estimated (cost utility analysis)	_____	_____
d. To compare the costs and outcomes for 2 or more programs, where outcomes are measured in dollars (cost benefit analysis)	_____	_____
e. To compare the costs and outcomes for 2 or more programs, where outcomes are measured in test scores, behavioral ratings, etc. (cost effectiveness analysis)	_____	_____

2. Is there currently a formal expectation or requirement within the district that your unit do some form of cost analysis work?

\_\_\_\_\_ NO \_\_\_\_\_ YES PLEASE EXPLAIN: \_\_\_\_\_

Approximately what percent of your total evaluation unit resources are currently devoted to performing some form of cost analysis work?

\_\_\_\_\_ PERCENT

3. Do you anticipate that over the next 5 years there will be a formal expectation or requirement that your unit do some form of cost analysis work?

\_\_\_\_\_ NO \_\_\_\_\_ YES PLEASE EXPLAIN: \_\_\_\_\_

Approximately what percent of your total evaluation unit resources do you believe will be devoted to performing some form of cost analysis work over the next 5 years?

\_\_\_\_\_ PERCENT



4. Some units report a number of impediments that prevent them from doing cost studies. Please indicate the degree to which the following factors restrain the number of cost studies done by your evaluation unit.

THESE FACTORS IMPEDE OUR DOING COST STUDIES: (Circle degree of agreement or disagreement for each factor.)	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	DON'T KNOW
a. We are seldom asked to do cost studies . .	SA	A	D	SD	DK
b. Decision makers are not often interested in actual cost information . . . . .	SA	A	D	SD	DK
c. Decision makers do not often use the results of cost studies . . . . .	SA	A	D	SD	DK
d. It takes too much time to conduct cost studies . . . . .	SA	A	D	SD	DK
e. It costs too much to conduct cost studies.	SA	A	D	SD	DK
f. Accurate cost data are usually not available . . . . .	SA	A	D	SD	DK
g. Cost study results are incomplete because it is not possible to include all important cost factors . . . . .	SA	A	D	SD	DK
h. Accurate outcome data are usually not available . . . . .	SA	A	D	SD	DK
i. It is difficult to relate cost data to educational outcomes . . . . .	SA	A	D	SD	DK
j. Cost results do not tell managers how to improve program operations . . . . .	SA	A	D	SD	DK
k. We lack staff with the technical capability to conduct cost studies . . . . .	SA	A	D	SD	DK
l. We lack available consultants or experts to help us conduct cost studies . . . . .	SA	A	D	SD	DK
m. We do not have sufficient experience in conducting cost studies . . . . .	SA	A	D	SD	DK
n. We have few guidebooks, texts, or examples to follow in conducting cost studies . . .	SA	A	D	SD	DK

IF A COST ANALYSIS STUDY HAS NOT BEEN CONDUCTED BY YOUR  
EVALUATION UNIT IN THE PAST FIVE (5) YEARS, SKIP TO QUESTION 6.

5. Now we would like to know about cost analysis studies that have been conducted by your unit. Think back on all the cost studies that have been conducted in your unit during the past 5 years. Please provide a brief summary of the study you consider to be the "best" example of a cost analysis study conducted in your unit.

a. The topic (e.g., bus leasing; a reading program)

b. Type of cost study (e.g., cost description, cost feasibility, cost utility, cost benefit, cost effectiveness--see question 1 for descriptions)

c. The decision or actions resulting from the study

d. Your assessment of the value of this particular study

e. Major difficulties in implementing the study

f. Title and year of the study report

SKIP TO QUESTION 7

6. What would you say was the primary reason no cost analysis studies have been conducted by your unit in the past five (5) years?

#### **COST EFFECTIVENESS ANALYSIS**

7. One type of cost analysis procedure, **COST EFFECTIVENESS ANALYSIS**, compares all the costs (e.g., personnel, facilities, equipment) of two or more similar programs to measures of program outcomes (e.g., test scores, behavioral changes).

**CHECK YOUR HIGHEST LEVEL OF FAMILIARITY WITH COST EFFECTIVENESS ANALYSIS (check one):**

- ☐ Have conducted studies using it
- ☐ Have studied or read about it
- ☐ Have minimal familiarity with it
- ☐ Have no knowledge of it

8. **COST EFFECTIVENESS ANALYSIS** is one of the most suitable ways of comparing the costs and outcomes of one education program with another, but so far the technique has been used little in educational evaluation. To understand why this technique is not widely used in educational evaluation, we would like your opinions about the following items.

DO YOU THINK THAT:

(Circle degree of agreement or disagreement for each factor.)

	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	DON'T KNOW
a. Cost effectiveness analysis is often unnecessary because decision makers are not interested in relating program costs and effects . . . . .	SA	A	D	SD	DK
b. Cost effectiveness analysis is often not feasible because comparative program studies are seldom possible . . . . .	SA	A	D	SD	DK
c. Cost effectiveness analysis is too specialized a technique to be generally applicable . . . . .	SA	A	D	SD	DK
d. Cost effectiveness analysis is so costly and complex that it is warranted only for major studies . . . . .	SA	A	D	SD	DK
e. Cost effectiveness analysis considers only a limited number of program outcomes and so does not represent true program effects. SA	A	D	SD	DK	
f. Cost effectiveness analysis is of limited utility since it provides no information on program procedures or local conditions. SA	A	D	SD	DK	
g. Cost effectiveness analysis is difficult to do because of technical details (e.g., discount rates) and the need for sophisticated analysis procedures . . . . .	SA	A	D	SD	DK
h. Cost-effectiveness analysis cannot be applied to educational programs without further development of the method . . . . .	SA	A	D	SD	DK

Finally, in order to understand the differences among school district evaluation units with respect to cost analysis, we need to know a few facts about your unit.

9. How many students are enrolled in your district?

Number of students: \_\_\_\_\_

10. What was the total annual budget for your evaluation unit for the 1983-1984 school year?

Total budget: \$ \_\_\_\_\_

11. How many full-time equivalent (FTE) professional staff worked in your unit during the 1983-1984 school year?

Total professional staff: \_\_\_\_\_ FTE

12. Many evaluation units have responsibilities other than conducting evaluation studies. Please indicate below the major responsibilities of your evaluation unit during 1983-1984.

CHECK ALL MAJOR RESPONSIBILITIES:

- \_\_\_\_\_ a. Evaluation studies
- \_\_\_\_\_ b. Evaluation monitoring
- \_\_\_\_\_ c. Testing programs
- \_\_\_\_\_ d. Planning
- \_\_\_\_\_ e. Research studies
- \_\_\_\_\_ f. Consultation/technical assistance
- \_\_\_\_\_ g. Policy analysis
- \_\_\_\_\_ h. Needs assessment
- \_\_\_\_\_ i. Information provision
- \_\_\_\_\_ j. Other (please specify) \_\_\_\_\_

*Thank You.*

Please use the enclosed envelope to return this completed questionnaire to Dr. Jana Kay Smith, Research on Evaluation Program, Northwest Regional Educational Laboratory, 300 S.W. Sixth Avenue, Portland, OR 97204. For inquiries, call 1-800-547-6339.

